

Agent's File: SAB-017

THE HONOURABLE ASSISTANT COMMISSIONER FOR PATENTS  
Washington, D.C. 20231

Sir:

Transmitted herewith for filing is the patent application of

Inventor(s): Ben BALDWIN and George BALDWIN

For: JOB MATCHING SYSTEM AND METHOD

Enclosed are:

- ☒ 6 sheet(s) of drawing(s).  
An assignment of the inventor(s) to \_\_\_\_\_  
☐ A certified copy of a \_\_\_\_\_ application.  
☒ Declaration and power of attorney.  
☒ Verified statement(s) to establish small entity status under 37 CFR 1.9 and 37 CFR 1.27.  
☐ An Information Disclosure Statement.

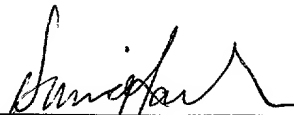
The filing fee has been calculated as shown below:

	(Col. 1)	(Col. 2)	SMALL ENTITY			OTHER THAN SMALL ENTITY	
FOR:	NO. FILED	NO. EXTRA	RATE	FEE	OR	RATE	FEE
BASIC FEE					OR		\$380.00
TOTAL CLAIMS	20 - 20 = 0	*0	x 9		OR	x 18	\$0.00
INDEP. CLAIMS	3 - 3 = 2	*0	x 39		OR	x 78	\$0.00
MULTIPLE DEPENDENT CLAIM PRESENTED			x 130		OR	x 260	
ASSIGNMENT(S) RECORDATION FEE(S)			x 40			1 x 40	\$0.00
* If the difference in Col. 1 is less than zero, enter "0" in Col. 2			TOTAL		OR	TOTAL	\$380.00

Agent's File: SAB-017THE HONOURABLE ASSISTANT COMMISSIONER FOR PATENTS  
Page 2

- ☐ Please charge our Deposit Account No. \_\_\_\_\_ in the amount of \$ \_\_\_\_\_. A duplicate copy of this sheet is enclosed.
- ☐ A check in the amount of \_\_\_\_\_ is enclosed to cover the filing fees and assignment recordal fee.
- ☐ The Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. \_\_\_\_\_. A duplicate copy of this sheet is enclosed.
- ☐ Any additional filing fees required under 37 CFR 1.16.
  - ☐ Any patent application processing fees under 37 CFR 1.17.
- ☐ The Commissioner is hereby authorized to charge payment of the following fees during the pendency of this application or credit any overpayment to Deposit Account No. \_\_\_\_\_. A duplicate copy of this sheet is enclosed.
- ☐ Any patent application processing fees under 37 CFR 1.17.
  - ☐ The issue fee set in 37 CFR 1.18 at or before mailing of the Notice of Allowance, pursuant to 37 CFR 1.311(b).
  - ☐ Any filing fees under 37 CFR 1.16 for presentation of extra claims.

Respectfully submitted,

David Jacobson  
Registration No. 39,235Law Offices of David P. Gordon  
65 Woods End Road  
Stamford, Connecticut  
U.S.A. 06905Telephone No.: (203) 329-1160  
Fax No.: (203) 329-1180Enclosures  
(92265-1 MZ/cyy)

092265-1 MZ/cyy

**VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY  
STATUS (37 CFR 1.9(f) AND 1.27 (c)) - SMALL BUSINESS CONCERN**

Docket No.

92265-1

Serial No.

Filing Date

Patent No.

Issue Date

Applicant/

Patentee:

Ben BALDWIN and George BALDWIN

Invention:

JOB MATCHING SYSTEM AND METHOD

I hereby declare that I am:

- ☐ the owner of the small business concern identified below:  
☒ an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF CONCERN: CAREERXACT INC.ADDRESS OF CONCERN: 4950 Yonge Street, Suite 2200, Toronto, ON, M2N 6K1  
Canada

I hereby declare that the above-identified small business concern qualifies as a small business concern as defined in 13 CFR 121.3-18, and reproduced in 37 CFR 1.9(d), for purposes of paying reduced fees under Section 41(a) and (b) of Title 35, United States Code, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both.

I hereby declare that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the above identified invention described in:

- ☒ the specification filed herewith with title as listed above.  
☐ the application identified above.  
☐ the patent identified above.

If the rights held by the above-identified small business concern are not exclusive, each individual, concern or organization having rights to the invention is listed on the next page and no rights to the invention are held by any person, other than the inventor, who could not qualify as an independent inventor under 37 CFR 1.9(c) or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

06T830-TH93E69

Each person, concern or organization to which I have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below:

- ☒ no such person, concern or organization exists.  
☐ each such person, concern or organization is listed below.

FULL NAME

ADDRESS

☐ Individual☐ Small Business Concern☐ Nonprofit Organization

FULL NAME

ADDRESS

☐ Individual☐ Small Business Concern☐ Nonprofit Organization

FULL NAME

ADDRESS

☐ Individual☐ Small Business Concern☐ Nonprofit Organization

FULL NAME

ADDRESS

☐ Individual☐ Small Business Concern☐ Nonprofit Organization

Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27)

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING:

Ben Baldwin

TITLE OF PERSON SIGNING

OTHER THAN OWNER:

ADDRESS OF PERSON SIGNING:

59 Blyth Hill Road  
Toronto, Ontario  
Canada M4N 3L6

SIGNATURE:

Ben Baldwin

DATE:

31 AUGUST 1999

Patent and Trademark Office-U.S. DEPARTMENT OF COMMERCE

**VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY  
STATUS (37 CFR 1.9(f) AND 1.27 (b)) - INDEPENDENT INVENTOR**Docket No.  
92265-1

Serial No.

Filing Date

Patent No.

Issue Date

Applicant/  
Patentee:

Ben BALDWIN and George BALDWIN

Invention:

JOB MATCHING SYSTEM AND METHOD

As a below named inventor, I hereby declare that I qualify as an independent inventor as defined in 37 CFR 1.9(c) for purposes of paying reduced fees under section 41(a) and (b) of Title 35, United States Code, to the Patent and Trademark Office with regard to the invention entitled above and described in:

- ☒ the specification to be filed herewith.  
☐ the application identified above.  
☐ the patent identified above.

I have not assigned, granted, conveyed or licensed and am under no obligation under contract or law to assign, grant, convey or license, any rights in the invention to any person who could not be classified as an independent inventor under 37 CFR 1.9(c) if that person had made the invention, or to any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

Each person, concern or organization to which I have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below:

- ☐ No such person, concern or organization exists.  
☒ Each such person, concern or organization is listed below.

\*NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention availing to their status as small entities (37 CFR 1.27)

FULL NAME CAREERXACT INC.  
ADDRESS 4950 Yonge Street, Suite 2200, Toronto, Ontario, M2N 6K1, CA

☐ Individual ☒ Small Business Concern ☐ Nonprofit Organization

FULL NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_

☐ Individual ☐ Small Business Concern ☐ Nonprofit Organization

FULL NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_

☐ Individual ☐ Small Business Concern ☐ Nonprofit Organization

FULL NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_

☐ Individual ☐ Small Business Concern ☐ Nonprofit Organization

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF INVENTOR Ben BaldwinSIGNATURE OF INVENTOR *Ben Baldwin*DATE: 31 AUGUST 1999NAME OF INVENTOR George BaldwinSIGNATURE OF INVENTOR *George Baldwin*DATE: 31 AUGUST 1999

NAME OF INVENTOR \_\_\_\_\_

SIGNATURE OF INVENTOR \_\_\_\_\_

DATE: \_\_\_\_\_

NAME OF INVENTOR \_\_\_\_\_

SIGNATURE OF INVENTOR \_\_\_\_\_

DATE: \_\_\_\_\_

NAME OF INVENTOR \_\_\_\_\_

SIGNATURE OF INVENTOR \_\_\_\_\_

DATE: \_\_\_\_\_

NAME OF INVENTOR \_\_\_\_\_

SIGNATURE OF INVENTOR \_\_\_\_\_

DATE: \_\_\_\_\_

NAME OF INVENTOR \_\_\_\_\_

SIGNATURE OF INVENTOR \_\_\_\_\_

DATE: \_\_\_\_\_

NAME OF INVENTOR \_\_\_\_\_

SIGNATURE OF INVENTOR \_\_\_\_\_

DATE: \_\_\_\_\_

NAME OF INVENTOR \_\_\_\_\_

SIGNATURE OF INVENTOR \_\_\_\_\_

DATE: \_\_\_\_\_

NAME OF INVENTOR \_\_\_\_\_

SIGNATURE OF INVENTOR \_\_\_\_\_

DATE: \_\_\_\_\_

Patent and Trademark Office-U.S. DEPARTMENT OF COMMERCE

## JOB MATCHING SYSTEM AND METHOD

## FIELD OF THE INVENTION:

5       The present invention relates to a method and system  
for matching employment candidates to employment positions,  
and more particularly to a job matching system and method  
that utilizes personality profiles and possibly interests of  
candidates to match candidates to jobs.

10

## BACKGROUND OF THE INVENTION:

Locating a suitable candidate for an available  
employment position is typically a difficult task. The  
15       traditional job application process requires interested  
candidates to submit a resume in response to a job  
availability advertisement. Such advertisements set out job  
requirements, typically in the form of desired or required  
job skills. The resumes, in turn, include the educational,  
20       employment, skill, and personal interests of the candidates.

Too often, however, the qualifications of the  
candidates presented on the resumes appear all too similar,  
making the review and paring of potential candidates  
25       extremely difficult. Similarly, the resumes are often  
distorted or otherwise unreliable. This is particularly  
acute with entry-level job openings. Nevertheless, resumes  
of the most promising candidates are selected, and these  
candidates are personally interviewed, screened by  
30       telephone, or the like. Usually several rounds of personal  
interviews are used to further weed the selected candidates,  
until few are left. Sometimes a candidate is hired from  
these selected few, without further interviewing or testing.

Others may be subjected to a job aptitude or personality test, and thereafter hired.

Of those that are eventually hired using the  
5 conventional hiring process, many will not be successful for many reasons. For example, the eventual employees may not fit into the employer's culture, or have the personality traits or interests that are desirable for success.

10 Accordingly, a more effective method of matching job candidates to jobs is desirable.

#### SUMMARY OF THE INVENTION:

15 It is an object of the present invention, to provide an improved job matching system, that more quickly and easily identifies suitable job candidates, and provides an increased likelihood that matched job candidates are suitable for a particular job.

20 In accordance with the present invention, measures of personality traits are used to match candidates to employment positions. Candidates' traits may be assessed by administering a questionnaire. A similar questionnaire may  
25 be provided to suitable employees who are already filling, or have previously filled, available employment positions at different companies within different industries, in order to assess personality traits of suitable employees for each position. Results are preferably received and compared. A  
30 list of suitable jobs with different employers may then be provided to the candidate.

Advantageously, then, candidates may communicate to potential employers at an early stage of the application



process that they have a personality profile suitable to a particular employment position. In turn, an employer may take comfort that a matched candidate has a personality profile suitable for an employment position.

5

Methods in accordance with the present invention may be embodied in computer software.

Other aspects and features of the present invention will become apparent to those of ordinary skill in the art, upon review of the following description of specific embodiments of the invention in conjunction with the accompanying figures.

15 BRIEF DESCRIPTION OF THE DRAWINGS:

In figures which illustrate, by way of example only, preferred embodiments of the invention,

20 FIG. 1 illustrates a computing system used to implement a job matching system exemplary of an embodiment of the present invention;

FIG. 2 illustrates the format of a portion of an exemplary database stored on a computing device of FIG. 1;

25 FIG. 3 illustrates the format of another portion of an exemplary database stored on a computing device of FIG. 1

FIG. 4 is a flow chart of steps performed by an employer, exemplary of an embodiment of the present invention;

30 FIG. 5 is a flow chart of steps performed by an employment candidate, exemplary of an embodiment of the present invention; and

FIG. 6 is a flow chart of steps performed by a computing device of FIG. 1, exemplary of an embodiment of the present invention.

5 DETAILED DESCRIPTION:

FIG. 1 illustrates a computing system 10, used to implement a job matching system exemplary of the present invention. Computing system 10 includes a computer data  
10 network 12, in communication with computing device or server 14, and computing devices 16 and 18.

Computer data network 12 may for example, be the public internet; a local area network; or any other computing  
15 network known to those of ordinary skill in the art. Server 14 is preferably a conventional network capable server, and as such may include a microprocessor; memory; a network interface; a keyboard; and a monitor (all not shown).

20 Most preferably, server 14 is at the premises of, and controlled by administrators of the job matching method disclosed herein. Computing device 16 is preferably at the premises of, and controlled by a potential employer; while computing device 18 is preferably at the premises of, and  
25 controlled by an employment candidate. For clarity only server 14 and two other network interconnected computing devices 16 and 18 are illustrated. Of course, server 14 is preferably in communication with numerous other network interconnected computing devices that may be controlled by  
30 various other employers and employment candidates.

The memory of server 14 stores an operating system 20, such as Windows NT Server, UNIX, or similar network aware

operating system. As well, memory of server 14 stores application software 22 that enables server 14 to execute steps exemplary of the present invention. Application software 22 may also include an internet Web server, such as the Apache Web server, or Microsoft Back Office; an interpreter, real-time compiler, or libraries allowing execution of programs in a known computing language, such as Perl or Visual Basic; a database engine, such as Microsoft SQL Server, or Oracle. Additionally, server 14 stores a database 24 storing job and candidate data, as described below. As will be appreciated, memory of server 14 may include any suitable combination of random access memory; read-only memory; disk storage memory; or the like.

Computing devices 16, and 18 are preferably conventional network aware "client" computers, and as such include a microprocessor; a network interface, such as a modem or Ethernet interface; keyboard; display; and memory storing an operating system such as Windows NT, the MAC OS, Linux or the like and including network interface software; and preferably a hypertext markup language ("HTML") capable network browser, such as the Netscape Communicator, Navigator or Microsoft Internet Explorer browser. Most preferably this browser is further capable of interpreting and executing program instructions downloaded from the interconnected network and from server 14, possibly written in the Java or JavaScript computing languages.

An exemplary organization of database 24 is illustrated in FIGS. 2 and 3. As illustrated in FIG. 2, database 24 includes an employment position portion 26, that preferably includes a relational database table made up of records for each of a number of employment positions, that are

preferably available. Each record preferably includes several fields 28 storing details about an available job, including such data as employer; job title; contact person; job description; location; and the like, as illustrated in  
5 fields 28a, 28b, 28c, 28d, and 28e, respectively. Additionally, each record includes a plurality of personality attribute fields 30 each containing a range of numerical values assigned to an identified personality attribute of a desired employee for that job.

10

As illustrated, example personality attribute fields may include measures of a preferred employee's

- 66 FEB 20 1999
- a) independence (field 30a) [low score = diplomatic, high score = independent];
  - 15 b) competitiveness (field 30b) [low score = cooperative; high score = competitive];
  - c) assertiveness (field 30c) [low score = submissive, high score = assertive];
  - d) conscientiousness (field 30d) [low score = spontaneous, high score = conscientious];
  - 20 e) convention (field 30e) [low score = innovative, high score = convention];
  - f) organization (field 30f) [low score = reactive; high score = organized];
  - 25 g) extroversion (field 30g) [low score = introvert, high score = extrovert];
  - h) group orientation (field 30h) [low score = self sufficient, high score = group oriented];
  - i) outgoingness [low score = reserved, high score = outgoing] (field 30i);
  - 30 j) stability (field 30j) [low score = emotional; high score = stable];

- k) poise (field 30k) [low score = restless, high score = poised];
- l) relaxedness (field 30l) [low score = excitable, high score = relaxed]; and
- 5 m) social desirability (field 30m) [low score = frank, high score = social desirability].

Each field is preferably populated with a range of numerical entries, bounded between two finite values, and  
10 derived as described below. In the example embodiment, values between 1 and 10 are used. Collectively, the assessment of these attributes provide an aggregate personality profile for any particular job. Most preferably, identical personality attributes for each  
15 employment position stored in database 24 are evaluated to form an aggregate profile.

Additionally, and optionally, each record could contain a plurality of interest attribute fields (not shown) each  
20 containing a range of numerical values assigned to an identified interest attribute of a desired employee for that job. Interest attributes may for example identify an employee's interest in working with people; working with data; or working with things. Each interest attribute field  
25 also contains a range of numerical values assigned to an identified interest attribute of a desired employee for that job.

As illustrated in FIG. 3, database 24 further includes  
30 a candidate portion 32, including a relational database table made up of entries for each available candidate. Each record contains fields 34 identifying the candidate preferably by name; address; date of birth; serial number;

- and the like, as illustrated as fields 34a, 34b, 34c, 34d, respectively. As well, each record contains a plurality of personality attribute fields 36 for that candidate. The serial number may be generated by application software 22.
- 5 As will become apparent, each personality field 36a-36m is preferably populated with a single numerical measure of the associated candidate's trait.

- The personality attribute fields 36 correspond to those
- 10 stored in fields 30, for employment positions. That is, each field 36 stores a value representing the assessment of a particular personality trait of a candidate; a corresponding field 30 stores an appropriate range of values representing the assessment of that trait for suited
- 15 candidates for a particular employment position.

- In operation, employers provide personality profile information regarding employment positions as desired, as illustrated in steps 400 of FIG. 4. Specifically, data
- 20 profiling each employment position is initially assembled by employers in step S402. Most preferably, a potential employer collects job profile data, representative of personality profiles for ideal candidates for available employment positions. The data may be collected by a human
- 25 resource department of an organization. The data is ideally collected with the assistance of a representative familiar with job matching methods exemplary of the present invention. Most preferably the job profile characteristics for a potentially available job are determined by assessing
- 30 those personality traits of top performers already employed or previously employed in the available position. The job profile characteristics are quantified for each personality trait identified as relevant for the particular position.

Preferably, multiple employees (or former employees) are profiled so that a numerical range of acceptable values can be determined for each personality trait.

5        Additionally, or optionally, a job profile may be  
formed manually, by assessing desirable ranges of  
personality traits heuristically with the assistance of a  
representative familiar with job matching methods exemplary  
of the present invention. This may be particularly useful  
10    for employment positions that have not previously been  
filled, or to confirm that perceived personality traits of  
employees correspond to those of top performers. Of course,  
where perceived traits differ from those of actual top  
performers, the assessed traits of proven top performers  
15    should be used.

         A specific system that may be used to assess the  
personality profiles of employees, is for example, available  
from ICES Assessment Systems Inc., of 2<sup>nd</sup> Street, Holetown,  
20    St. James, Barbados, West Indies in association with the  
trademark ICES PLUS ASSESSMENT and is detailed more  
particularly in the PREVUE ASSESSMENT Technical Manual, 3<sup>rd</sup>  
Edition, ICES Assessment Systems Inc., June 1998, the  
contents of which are hereby incorporated by reference. As  
25    detailed therein, psychologists have identified five major  
factors indicative of personality, namely Extraversion;  
Agreeableness/Independence; Conscientiousness; Anxiety; and  
Openness to Experience. A questionnaire forming part of the  
system is heralded as statistically accurate, consisting of  
30    one-hundred-and-fifty-two questions. Answers to these  
questions are used to produce a mapping of personality  
traits in thirteen categories, evaluated numerically with  
values in the range of 1-10. The categories correspond to

those traits represented by fields 30a-30m or 36a-36m.

While the ICES system provides a convenient personality profile assessment for individuals, it will be understood that many other profile assessments may be used. For example, a behavioral psychologist could easily design a profile assessment questionnaire that could be used to determine measures of many recognized personality traits. A suitable profile assessment questionnaire should ensure that answers to the questions provide statistically valid and reliable results. Server 14, and the exemplary methods of practising the present invention would be suitably modified to use such a questionnaire and store tabulated results in database 24.

Regardless of which technique is used to gather the relevant information, the employer may then present such information to server 14 by way of computing device 16 and network 12 in step S404. For example, once the data is collected, it may be passed to server 14 by way of an HTML form presented at device 16. Alternatively, the data may be submitted by way of electronic mail, or using any other known protocol, such as for example the file transfer protocol, or the like. Alternatively, the collected data may be transferred to an operator or administrator proximate server 14 using another known method. The data could, for example, be delivered in person, by telephone, regular mail, or in many other ways. The operator or administrator may then enter the data at server 14. Once received the data is stored within portion 26 of database 24.

Additionally, a prospective employer should enter into a binding agreement with operators of server 14. The agreement should oblige the prospective employer to agree to



grant interviews or personal contact to suitable candidates, as described below. The agreement may further oblige an employer to notify server 14 or its operators as soon as a job is no longer available; and to pay the operators for services provided. Again, if the law permits, a suitable contract may be entered into using HTML forms filled-in and executed at device 16 in step S406.

For example, suppose a prospective employer X wishes to hire a new sales clerk. Personality evaluations of existing sales clerks for employer X (performed in step S402) using the ICES PLUS ASSESSMENT SYSTEM reveal that the ideal sales clerk has the following range of personality traits, as quantified:

- a. independence = 7-9;
- b. competitiveness = 6-8;
- c. assertiveness = 7-9;
- d. conscientiousness = 5-8;
- e. convention = 7-9;
- f. organization = 5-7
- g. extroversion = 6-8;
- h. group orientation = 2-4;
- i. outgoing = 5-7
- j. stability = 2-4 ;
- k. poise = 2-5;
- l. relaxation = 2-5 and
- m. social desirability = 7-9.

As noted, collectively the assessment of these traits may be referred to as an aggregate job profile for a sales clerk with employer X.

As will be appreciated, the aggregate profile may be assessed using questionnaires presented to current

employees, and completed in conjunction with periodic employee performance evaluations for existing employees. Alternatively, the aggregate profile may be created as a job becomes available. As another option, the job profile could  
5 be created by human resource specialist, psychologists or the like. Once available, this data is provided to server 14, in step S404 and stored within portion 26 of database 24. Specifically, a record representative of a sales clerk for company X is created and job-particular fields 28 are  
10 filled. Trait fields 30a-30m are completed accordingly, reflecting the assembled data, as illustrated in FIG. 2. Employer X may also enter into a service agreement as detailed with reference to step S406.

15 Other records of database table 26, representative of other available employment positions may be completed by employer X, or other employers. Most preferably all available employment positions are characterized by aggregate job profiles including evaluations of the same  
20 defined traits. Thus, all database records preferably include identical defined personality attribute fields.

As such, database 24 serves as a repository for available employment positions from multiple employers. As  
25 a particular job position is filled, the corresponding employer could notify server 14, so that the particular job may be deleted from the database 24. Alternatively, for reasons that will become apparent, filled positions may also be maintained within database 24.

30 Once at least some entries of database 24 have been populated with job related data, an employment candidate proximate network computing device 18, preferably performs steps 500 illustrated in FIG. 5. Specifically, the  
35 candidate uses computing device 18 including its network

interface software and browser, to establish a network connection with server 14 over network 12, in step S502. In response, server 14 using application software 22 stored within its memory presents the candidate proximate computing device 18 with a questionnaire allowing the candidate to present personal information such as the candidate's name, address, date of birth, and the like, in step S504. As well, preferably computing device 18 prompts the candidate to present service payment information, such as credit card billing information; an electronic cash identifier; or the like in step S506, for the job matching services provided by server 14. The prompts and questionnaire are preferably presented to the candidate by way of an HTML form, generated by browser software at computing device 18. Next, server 14 verifies the payment information, and preferably charges the candidate's payment account a fee for using the described job matching service, also in step S506.

The personal information is then preferably stored at server 14 in fields 34a-34d of database 24. Thereafter, server 14 causes computing device 18 to present a personality assessment questionnaire to the candidate, by for example, causing a series of standardized questions to be presented to the candidate, in steps S508-S510. Again, the questions are preferably presented to the candidate by way of an HTML form generated by browser software at computing device 18. Alternatively, the questionnaire could be presented by way of a Java applet, or JavaScript program provided by server 14 to device 18. As will be appreciated, such a form allows questions to be answered. Each response may be provided by computing device 18 to server 14, by data network 12 as each response is provided, also in step S508.

Alternatively, all responses may be provided at the conclusion of the questionnaire.

Preferably, the candidate assessment questionnaire is identical to the assessment presented by employers to suitable employees as detailed with reference to step S402 (FIG. 4). Again, the known ICES PLUS ASSESSMENT system may be used to present questionnaires to candidates. Alternatively, another personality assessment system may be used. Preferably, the series of standardized questions includes internal consistency measures to ensure that a candidate's responses are consistent and therefore likely honest. Most preferably, questions asked of candidates and employees are compatible, so that a correlation between candidate scores and employer job profiles may be easily determined. Additionally, and optionally, the questionnaire may include questions suitable to numerically assess the candidate's interests.

FIG. 6, in turn illustrates steps 600 performed at server 14. As illustrated, once the above described questionnaire has been completed by a candidate, results are received in step S602, and application software 22 at server 14 tabulates values to populate fields 36 for that candidate in step S604. Alternatively, the Java applet or JavaScript application provided to computing device 18 may tabulate values to populate fields 36 for the candidate.

At the conclusion of tabulating suitable personality measures for a candidate, server 14 compares personality measures for the candidate to desired personality traits for jobs stored within portion 30 of database 24. This may be done in any number of ways. For example, server 14 may

calculate the difference between the candidate's evaluated personality traits and the stored personality traits for all available jobs within the database 24, in steps S606-S612 as illustrated in FIG. 6. A known metric may be used to

5 calculate this difference in step S606, for each personality trait. For example, a value of zero (0) may be awarded for each candidate trait value stored in fields 36a-36m which falls within the range of the corresponding employment position trait stored in fields 30a-30m. For each trait for

10 which the candidate trait value does not fall within the range, a value equal to the distance between the candidate trait value and the midpoint of the employment position range may be awarded

(ie. Difference =  $\text{abs}(\text{candidate score} - [(\text{lower bound} + \text{upper bound})/2])$ ).

15

Once metrics for all traits within the aggregate profile for each available job are tabulated, these may be summed. As should be apparent, the closer to zero the

20 summed score, the better the personality match between a candidate and an employment position. For convenience, the tabulated score may be converted into a more meaningful indicator of job suitability, by, for example subtracting the tabulated score from 95. Thus, a candidate with a

25 perfect match is said to be a 95% match for the available job. The summed score for each employment position may be stored temporarily within memory 22 or within database 24.

In the event interest attribute fields are stored

30 within database 24, these too may be compared to assessed interest attributes for each candidate in a similar manner.

Optionally, table 26 may further include one or more fields (not illustrated) for each available employment position identifying "critical personality traits" for suitable job candidates. These "critical personality traits" would identify which of traits stored in fields 30a-30m necessitate a match for a given candidate to be considered suitable for a given job. That is, for candidates that do not have a corresponding personality trait that fall within the range for a critical category, the job will simply not be provided to the candidate. For example, a job may require an extremely diplomatic individual. As such, diplomacy may be identified as a critical trait, requiring a match. Assuming a candidate did not exhibit a measure of diplomacy in the range for the particular employment position, the candidate would not be assessed as suitable for the job, notwithstanding that measures for all other traits are within the identified range for the job.

Next, in step S614, server 14 may provide to the candidate by way of computing device 18 and network 12 a list of jobs for which the candidate appears suitable, based on the comparisons performed in steps S606-S612. The list may be sorted in order of match. As well, only matches in a certain proximity to the ideal job profile may be provided to the candidate. For example, server 14 may provide a list including those only those jobs for which a score of 80% or higher was tabulated. The provided list preferably includes complete job application information, including the job title; job description; name of employer; and contact information. The contact information may also include a network identifier in the form of a uniform resource locator ("URL") identifying the home page of a potential employer.

The list may be e-mailed to the candidate, provided as an HTML document, or may be downloaded by a candidate at this device 18. The URL identifying the potential employers may be used to contact the employers using device 18. The  
5 candidate may receive this list in step S512 (FIG. 5). As should be appreciated, payment information need not be collected in step S506, but could instead be collected and verified at any time prior to step S512.

10 Next, the candidate may individually select those particular jobs to which the candidate wishes to apply. The candidate may then apply to those employers directly, by dispatching a resume, identifying that services provided by  
15 server 14 have been used, and potentially under a cover letter/sheet provided by server 14, or operators of server 14 certifying a match using database 24. Alternatively or additionally, the candidate may use computing device 18 and the URL provided in step S512 to contact the employer in  
20 step S514. As well, in addition to providing the candidate with a list of jobs, in steps S512 and S614, application software 22 at server 14 may also provide computing device 16 with a printable certificate (in HTML, POSTSCRIPT, PORTABLE DOCUMENT FORMAT, or the like). The certificate may  
25 specifically identify the operators of server 14; the candidate; the employer and job; and a unique identifier, that may be used by an employer to gauge the authenticity of the document. The certificate acts as an authenticator, and thus authenticates that described job matching services have  
30 been used. By advising a potential employer that job matching service exemplary of this invention were used, the candidate may assure potential employers that their personality is suited for the available job. As will be

appreciated, the URL provided to the candidate in step S512 and S614 need not be generally known and may thus similarly function as an authenticator. The employers, in turn, may rely on the results of calculations of server 14 and should

5 provide those candidates with personal contact, preferably in the form of interviews. Employers, of course, may further screen candidates by reviewing resumes to ensure that the candidates have minimum skills. The cover letter provided by server 14 (or operators of server 14) also

10 preferably includes an indication of the degree of match of the candidate. For example, the cover letter may indicate the degree of match as "Excellent"; "Very High"; "Above Average" or include a numerical measure such as "78% Match"; "80% Match"; "93% Match" or the like, calculated as above.

15

In the event that the candidate has matched employment positions that are no longer vacant, the employers may still wish to offer the candidate personal contact in view of the high degree of match between the candidate's personality and

20 the personality profile of an employment position that may one day become vacant. Alternatively, the employer may wish to keep the candidate's name on file.

25

Additionally, the cover sheet may further identify a job type, for which the candidate has been found to be a suitable match. For example, if a candidate has been found to be suitable match for one or more sales clerk positions, the cover sheet may indicate that the candidate has

30 personality traits suitable for such a position. This being the case, the candidate could approach other employers, not necessarily using the services of server 14, and offering such employment positions with the cover sheet. Such employers could give credit to the job match, as they feel



appropriate or could contact the operators of server 14 for more information.

5 Preferably, the potential employers are not provided with particulars about suitable candidates, and therefore are unable to initiate contact with the candidates. Each candidate thus preferably has full control to contact the employers of choice, and obtain preferential treatment using the results of the match provided by server 14.

10

Conveniently, because the candidates have been pre-screened in accordance with methods exemplary of the present invention, employers are able to process their applications more expeditiously, with assurances that the personality  
15 profile of the candidate is suited for the available job position. Even if candidates do not appear to have the exact skills required by the employer, the employer has some assurance that the candidate, with proper training could fill the job. As should be appreciated, the methods  
20 detailed herein, are particularly well suited to select candidates for entry level positions. Candidates, on the other hand are provided with preferential treatment as they have been identified a potentially successful candidates.

25 As will be appreciated, the above described embodiments are susceptible to numerous modifications. Most significantly, the described methods could be performed without the use of any computing equipment. Job and candidate assessments could be conducted manually, and  
30 results could be tabulated manually. Results could be hand or mail delivered. Similarly, only portions of the described methods could be performed manually.

As well, while the organization of software blocks, data and data structures have been illustrated specifically and as clearly delineated, a person skilled in the art will appreciate that numerous other arrangements of software blocks and data are possible. For example, databases may be arranged differently, with more or fewer fields, or an object oriented database could be used. Additionally, software embodying the described methods may be distributed by way of computer readable medium or by way of carrier wave propagated on network 12.

The above described embodiments, are intended to be illustrative only and in no way limiting. The described embodiments of carrying out the invention, are susceptible to many modifications of form, size, arrangement of parts, and details of operation. The invention, rather, is intended to encompass all such modification within its scope, as defined by the claims.

# BIBLIOGRAPHY

## WHAT IS CLAIMED IS:

- 1 1. A method of matching an employment candidate to specific  
2 employment positions from multiple employers, comprising:
- 3 a. receiving employment position data measuring  
4 a plurality of defined personality traits for  
5 suitable candidates for each employment  
6 position from said employers;
- 7 b. storing said received employment position  
8 data;
- 9 c. receiving individual candidate data,  
10 representative of personality traits for an  
11 individual candidate;
- 12 d. comparing said individual candidate data with  
13 said employment position data to produce a  
14 list of potential employment positions for  
15 said candidate from said employment positions;
- 16 e. providing said list to said candidate.
- 1 2. The method of claim 1, wherein a-d are performed using  
2 a computing device.
- 1 3. The method of claim 1 further comprising, providing  
2 said candidate with a candidate questionnaire in order  
3 to determine said individual candidate data.
- 1 4. The method of claim 3, further comprising providing an  
2 employee questionnaire to successful employees, filling  
3 each of said specific employment positions, to  
4 determine said employment position data.

- 1 5. The method of claim 4, wherein said candidate  
2 questionnaire and said employee questionnaire are  
3 identical.
- 1 6. The method of claim 1, wherein said received employment  
2 position data comprises a plurality of numerical  
3 ranges, each range indicative of a range of values of a  
4 single personality trait of a suitable candidate for  
5 one of said employment positions.
- 1 7. The method of claim 6, wherein said received candidate  
2 data comprises a plurality of numerical values, each  
3 numerical value indicative of a single personality  
4 trait for said employee.
- 1 8. The method of claim 7, wherein each of said plurality  
2 of ranges for each employment position, corresponds to  
3 one of said plurality of numerical values for said  
4 employee.
- 1 9. The method of claim 8, wherein said comparing comprises  
2 determining which of said numerical values for said  
3 candidate falls within a corresponding range for each  
4 employment position.
- 1 10. The method of claim 9, wherein said comparing includes  
2 calculating a metric comparing each trait of said  
3 candidate, with a corresponding trait for each of said  
4 employment positions.
- 1 11. The method of claim 10, wherein each metric is  
2 calculated by calculating a difference between a value  
3 for said trait of said candidate, and an average of a  
4 corresponding range for an employment position.

1 12. The method of claim 11, wherein said comparing further  
2 comprising summing all of said metrics to arrive at a  
3 score indicative of said candidate's suitability for an  
4 employment position.

1 13. The method of claim 1, further comprising providing  
2 said candidate with an authenticator, authenticating  
3 that said candidate has obtained said list.

1 14. The method of claim 13, wherein said authenticator  
2 comprises a document.

1 15. The method of claim 13, wherein said list includes  
2 identifiers of each of said employers.

1 16. The method of claim 1, further comprising:

2 f. receiving employment interest data measuring  
3 a plurality of defined interests for suitable  
4 candidates for each employment position from  
5 said employers;

6 g. storing said received employment interest  
7 data;

8 h. receiving individual candidate interest data,  
9 representative of interests for an individual  
10 candidate;

11 and wherein d. further comprises comparing said individual  
12 candidate interest data with said employment interest data  
13 to produce said list.

1 17. The method of claim 1, wherein at least one of said  
2 defined plurality attributes are chosen from the list  
3 of independence; competitiveness; assertiveness;  
4 conscientiousness; convention; organization;  
5 extroversion; group orientation; outgoing; stability;  
6 poise; relaxation; and social desirability.

1 18. A computer readable medium, storing computer software  
2 that when loaded into a computing device, adapts said  
3 computing device to:

- 4 (i) receive employment position data measuring a  
5 plurality of defined personality traits for  
6 suitable candidates for each of a plurality of  
7 employment positions from a plurality of  
8 employers;
- 9 (ii) store said received employment position data at  
10 said computing device;
- 11 (iii) receive individual candidate data, representative  
12 of personality traits for an individual candidate;
- 13 (iv) compare said individual candidate data with said  
14 employment position data to produce a list of  
15 potential employment positions for said individual  
16 candidate from said employment positions;
- 17 (v) provide said list to said individual candidate.

1 19. A computing device, for interconnection with a computer  
2 network, said computing device comprising:

- 3 a. a processor;

- 4           b.           computer memory in communication with said  
5                       processor;
- 6           said computer memory storing processor readable  
7           instructions adapting said computing device to:
- 1           (i) receive employment position data measuring a  
2                plurality of defined personality traits for  
3                suitable candidates for each of a plurality of  
4                employment positions from a plurality of  
5                employers;
- 6           (ii) store said received employment position data at  
7                said computing device;
- 8           (iii) receive individual candidate data, representative  
9                of personality traits for an individual candidate;
- 10          (iv) compare said individual candidate data with said  
11               employment position data to produce a list of  
12               potential employment positions for said individual  
13               candidate from said employment positions;
- 14          (v) provide said list to said individual candidate.
- 1   20.   The computing device of claim 19, further comprising
- 2           c.           a network interface, in communication said  
3                       processor and for interconnection with a  
4                       computer network to receive said employment  
5                       position data and said individual candidate  
6                       data from said computer network

## ABSTRACT OF THE DISCLOSURE:

A system for matching employment candidates to employment positions is disclosed. Measures of personality traits and optionally interests are used to match candidates to employment positions. Candidates' traits may be assessed by administering a questionnaire. A similar questionnaire may be provided to suitable employees who are already filling, or have previously filled, employment positions, in order to assess personality traits of suitable employees for each position. Results are preferably received and compared. A list of suitable jobs may then be provided to the candidate. Software and computer systems embodying the method are also disclosed.



1/6

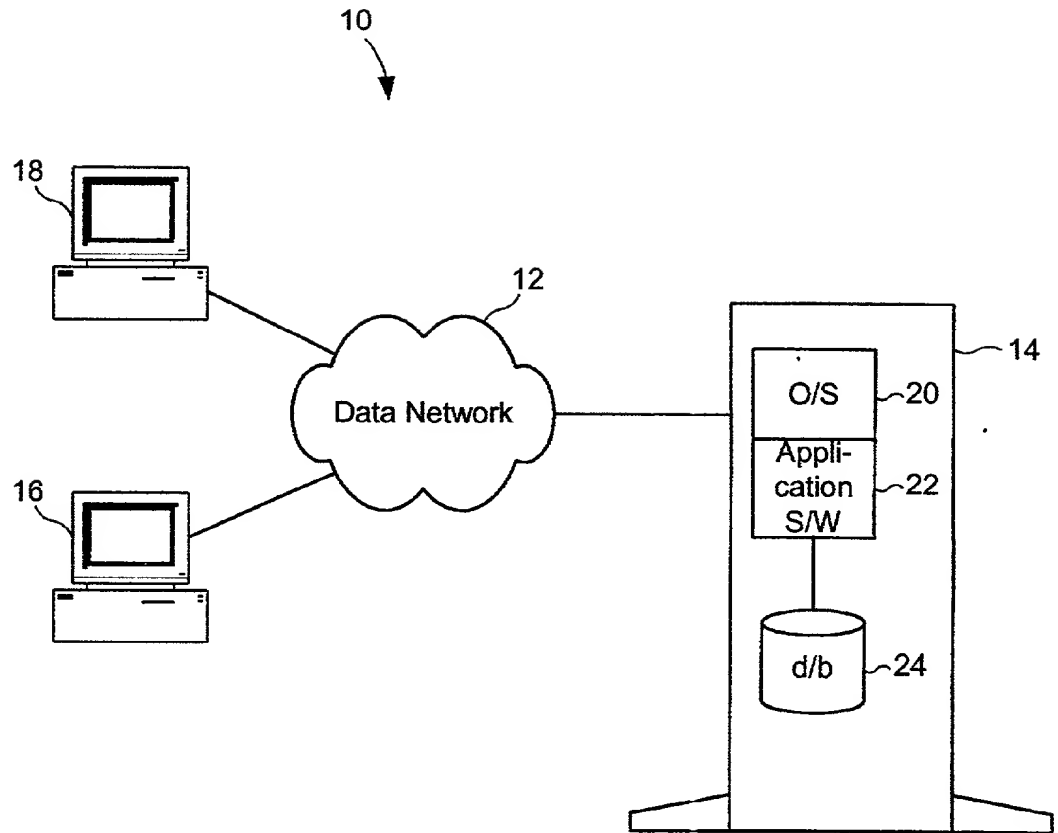


FIG. 1

2/6

26

Employer 28a	Em- ployer X	Sales Clerk	Mary Smith	http:// www.xc o.com	Cus- tomer support	Orlando FL	7-9	6-8	7-9	5-8	7-9	5-7	6-8	2-4	5-7	2-4	2-5	2-5	poise 30k relaxedness 30l	social desirability 30m
Job Title 28b																				
Contact 28c																				
Description 28d																				
Location 28e																				
Independence 30a																				
competitiveness 30b																				
assertiveness 30c																				
conscientiousness 30d																				
organization 30e																				
extroversion 30f																				
group orientation 30g																				
outgoingness 30h																				
stability 30i																				
poise 30k																				
relaxedness 30l																				
social desirability 30m																				

28

30

FIG. 2

65T620" T432E60

66T630-T499660

32

Name 34a	
Address 34b	
Date of Birth 34c	
serial number 34d	
Independce 36a	
competitiveness 36b	
assertiveness 36c	
conscientiousness 36d	
organization 36e	
extroversion 36f	
group orientation 36g	
outgoingness 36h	
stability 36i	
poise 36k	
relaxedness 36l	
social desirability 36m	

34

36

FIG. 3

4/6

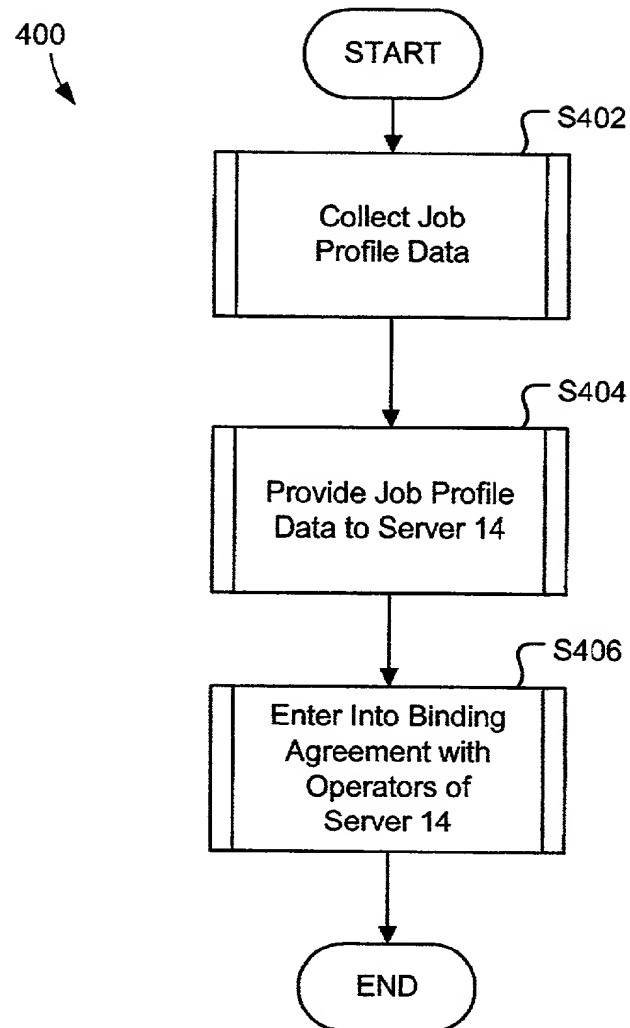


FIG. 4

5/6

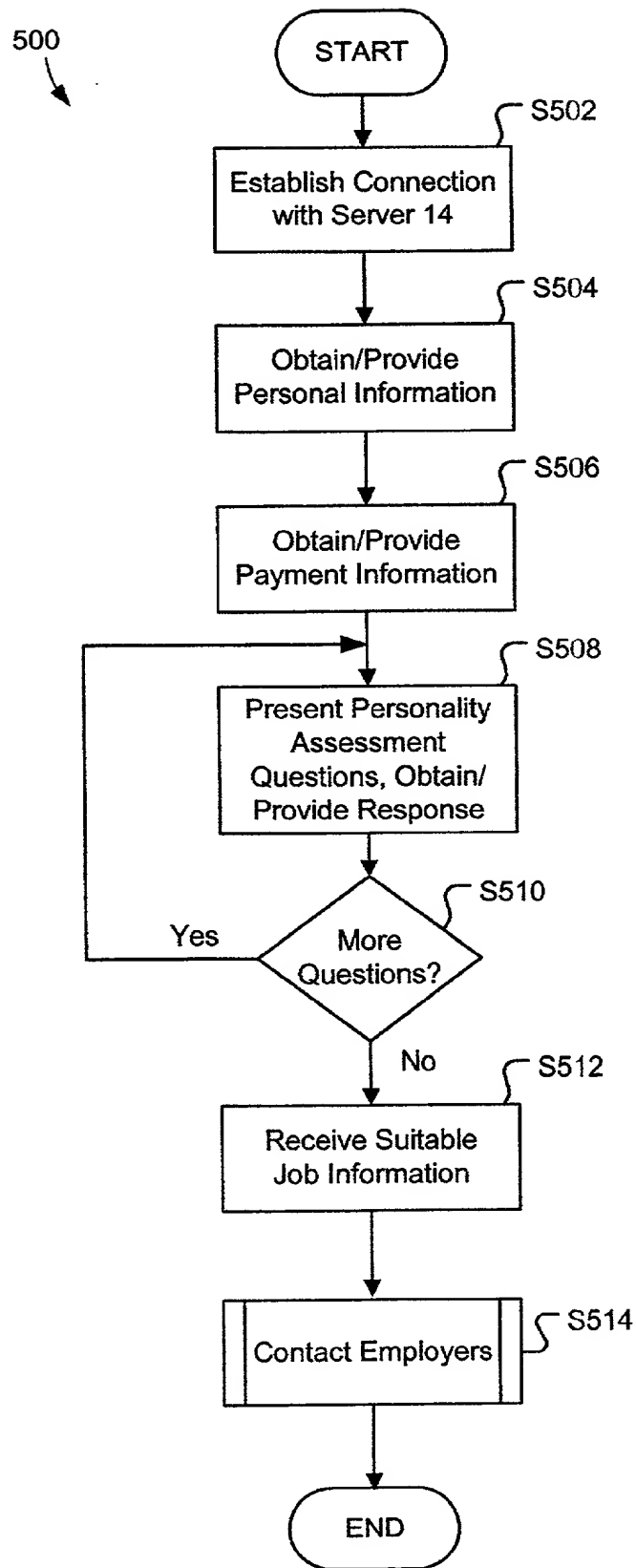


FIG. 5

6/6

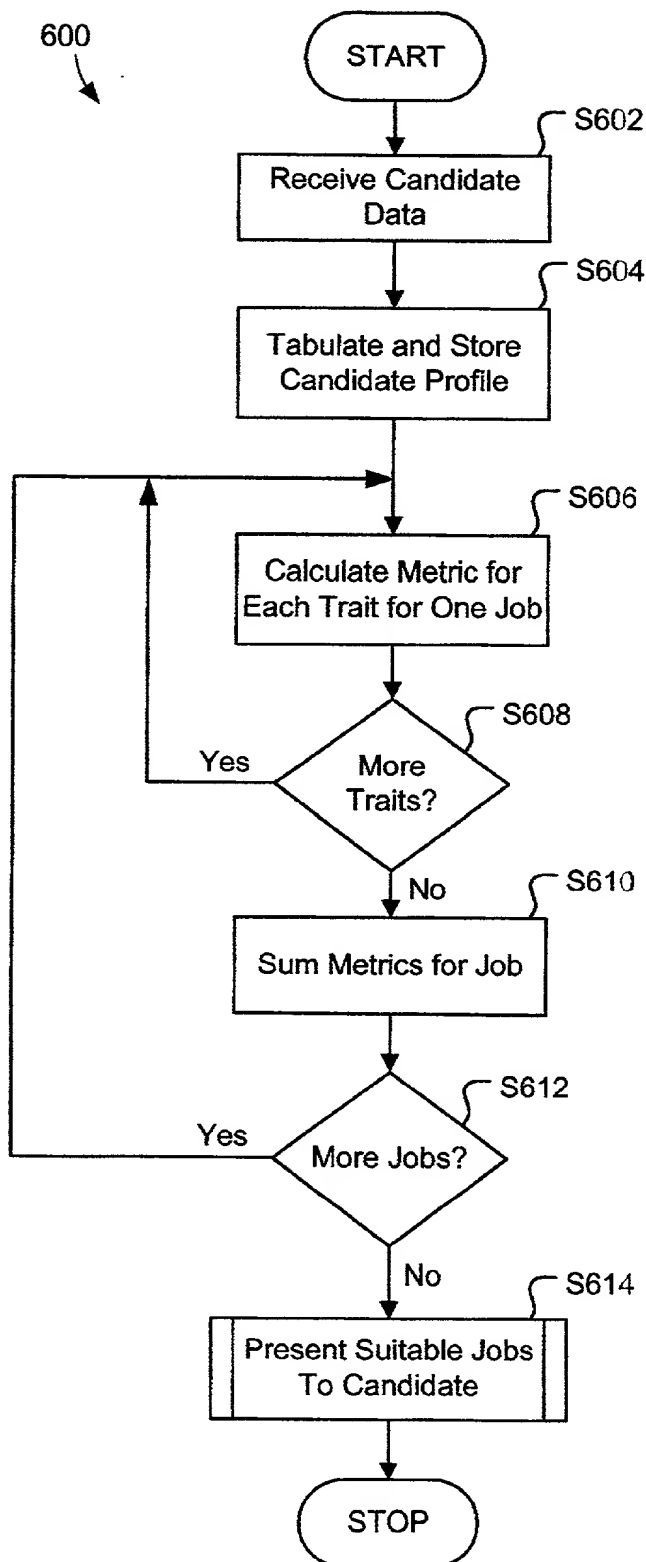


FIG. 6

Attorney Docket No. 92265-1

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**COMBINED DECLARATION AND POWER OF ATTORNEY**

As a below named inventor, I hereby declare that: my residence, post office address and citizenship are as stated below next to my name; that I verily believe that I am the original, first and sole inventor (if only one name is listed below) or a joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

JOB MATCHING SYSTEM AND METHOD

the specification of which

(check one)

☒ is attached hereto.

☐ was filed on \_\_\_\_\_

as U.S. Application Serial No. \_\_\_\_\_.

☐ was filed on \_\_\_\_\_

as PCT International Application No. PCT / \_\_\_\_\_.

and (if applicable) was amended on \_\_\_\_\_.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information known to me which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §§ 1.56(a) and (b), which state:

"(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is cancelled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability that is cancelled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practised or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

- (1) prior art cited in search reports of a foreign patent office in a counterpart application,
- (2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.

093641-03199

- 2 -

- (b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and
- (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
  - (2) It refutes, or is inconsistent with, a position the applicant takes in:
    - (i) Opposing an argument of unpatentability relied on by the Office, or
    - (ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability."

I hereby claim foreign priority benefits under 35 United States Code, § 119 and/or § 365 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate filed by me or my assignee disclosing the subject matter claimed in this application and having a filing date (1) before that of the application on which priority is claimed, or (2) if no priority claimed, before the filing of this application:

PRIOR FOREIGN APPLICATION(S)

<u>Number</u>	<u>Country</u>	<u>Filing Date</u> ( <u>Day/Month/Year</u> )	<u>Date First</u> <u>Laid-open or</u> <u>Published</u>	<u>Date</u> <u>Patented</u> <u>or Granted</u>	<u>Priority</u> <u>Claimed?</u>
---------------	----------------	-------------------------------------------------	--------------------------------------------------------------	-----------------------------------------------------	------------------------------------

none

I hereby claim the benefit under 35 United States Code, § 119(e) of any United States provisional application(s) listed below:

<u>Application Number</u>	<u>Filing Date</u>
---------------------------	--------------------

none

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56(a) which became available between the filing date of the prior application and the national or PCT international filing date of this application:

PRIOR U.S. OR PCT APPLICATION(S)

<u>Application No.</u>	<u>Filing Date</u> ( <u>day/month/year</u> )	<u>Status</u> ( <u>pending, abandoned, granted</u> )
------------------------	-------------------------------------------------	---------------------------------------------------------

none

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that wilful false statements and the like so made are punishable by fine or imprisonment, or both,

00338641 083199



- 3 -

under Section 1001 of Title 18 of the United States Code and that such wilful false statements may jeopardize the validity of the application or any patent issued thereon.

I hereby appoint the following patent agents with full power of substitution, association and revocation to prosecute this application and/or international application and to transact all business in the Patent and Trademark Office connected therewith:

JOHN R. MORRISSEY (Reg. No. 28585)  
 KELTIE R. SIM (Reg. No. 34535)  
 ALISTAIR G. SIMPSON (Reg. No. 37040)  
 MATTHEW ZISCHKA (Reg. No. 41575)  
 DAVID P. GORDON (Reg. No. 29996)  
 THOMAS A. GALLAGHER

GUNARS GAIKIS (Reg. No. 32811)  
 RONALD D. FAGGETTER (Reg. No. 33345)  
 YOON KANG (Reg. No. 40386)  
 YWE LOOPER (Reg. No. 43758)  
 DAVID S. JACOBSON

PLEASE SEND CORRESPONDENCE TO: Law Offices of David P. Gordon  
 65 Woods End Road  
 Stamford, Connecticut  
 U.S.A. 06905

Attention: David P. Gordon

Telephone: (203) 329-1160  
 Facsimile: (203) 329-1180

1) INVENTOR'S SIGNATURE: Ben Baldwin

Date: 31 August, 1999

Inventor's Name: Ben Baldwin  
 (First) (Middle Initial) (Family Name)

Country of Citizenship: Canada

Residence: Toronto, Ontario, Canada  
 (City, Province, Country)

Post Office Address: 59 Blyth Hill Road, Toronto, Ontario, M4N 3L6, Canada

0033641-083199

